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CENTRAL FAX CENTER****JAN 25 2007****CLAIM AMENDMENTS**

1. (Currently Amended) A voltage-impressed current measuring apparatus which impresses a prescribed voltage and measures ~~the~~ a current flowing to ~~in~~ in a load apparatus, comprising:

a current-range switching portion having: a plurality of ~~pairs connecting in series a plurality of current buffers with switches, having output stages capable of being electrically connected or disconnected in response to a supplied control signal, and current measurement resistances of differing resistance values respectively connected to the output stages of the current buffers with switches, wherein any one of the pairs is selected by a control signal to switch the current measurement range, said output stage of the current buffer with switch of said selected pair taken to be in a connected state; series connections, each comprising a current buffer with a switch connected in series with a current measurement resistance, wherein each of the current buffers with switches has an output stage capable of being electrically connected or disconnected and a pre-stage portion controlling the output stage in its connected or disconnected state in response to a control signal supplied thereto and capable of acting as a current buffer, the current measurement resistances have different resistance values, and one end of a measurement resistance connects to the output stage of its respective current buffer with a switch and the other end connects to the output side of the respective series connection connected to the load apparatus, and the control signal selects any one of the plurality of series connections to switch the current measurement range so that the output stage of the current buffer with a switch of the selected series connection is taken to be in its connected state;~~

a direct-current power supply portion, connected to input ends of the pre-stage portions as input sides of the respective series connections and supplying a the prescribed direct-current voltage to said the load apparatus through the selected series connection of the current buffer with switch and current measurement resistance selected by said current range switching means; and

a potential difference measuring means, measuring, as a value corresponding to the current flowing in ~~said the~~ said load apparatus, ~~the potential difference across the two ends of the current measurement resistance of said due to the impression of the direct-current voltage on the load apparatus, a potential difference between the input side and the output side of the selected series connection due to the current which accompanies the impression of said~~

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~~direct current voltage on said load apparatus and flows from the current buffer with a switch of said the selected series connection to said the load apparatus.~~

2. (Currently Amended) A voltage-impressed current measuring apparatus according to Claim 1, wherein ~~said the~~ direct-current power supply portion comprises

a digital-to-analog converter which converts ~~the supplied a~~ digital voltage value supplied to an input end thereof to an analog reference voltage, and

an operational amplifier ~~which controls to which the reference voltage is applied and which is controlled by feedback of the voltage impressed on said the load apparatus with respect to said reference voltage and supplies [the impressed voltage] so that an output voltage thereof is supplied to said the load apparatus via said the range switching portion.~~

3. (Currently Amended) A voltage-impressed current measuring apparatus according to Claim 2, wherein:

the input sides of ~~said the~~ plurality of current buffers with switches of ~~said the~~ range switching portion ~~are mutually connected and are connected to the output side of said the operational amplifier; the output sides of said current measurement resistances are mutually connected; and~~

a voltage at the input side voltage of the current buffers with switches and a voltage at the output side voltage of said of the current measurement resistances of the selected series connection are supplied to ~~said the~~ potential difference measuring portion as the voltages at both ends of the current measurement resistance of ~~said selected series connection to be measured the potential difference there between.~~

4.-6. (Withdrawn)

7. (Currently Amended) A voltage-impressed current measuring apparatus according to Claim 2, wherein

said operational amplifier has an inverted input terminal and a non-inverted input terminal connected to ground; and

said the current power supply portion comprises

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a first resistance inserted between ~~the an~~ output of ~~said the~~ digital-to-analog converter and the inverted input of ~~said terminal of the~~ operational amplifier, and

a second resistance inserted in the feedback path from ~~said the~~ load apparatus to the inverted input of ~~said terminal of the~~ operational amplifier; ~~and the non-inverted input of said operational amplifier is connected to~~ ground.

8.-9. (Withdrawn)

10. (New) The voltage-impressed current measuring apparatus of Claim 1 wherein the output sides of the plurality of series connections connect to a single terminal of a device under test.